AMENDMENTS TO THE SPECIFICATION

Beginning on page 5, please amend the first paragraph in the Detailed Description of the Preferred Embodiments section as follows:

Referring now to FIG. 1, there is shown a system 1 for providing remote diagnostic and remedial services in accordance with the present invention. System 1 includes a knowledge base 3 that stores diagnostic and remedial information. Also included in system 1 is a decision tree module 5 that is in communication with knowledge base 3 and that is used to present the information contained in knowledge base 3 in a diagnostically useful format. In an alternative embodiment, knowledge base 3 and decision tree module 5 are integrated. System 1 also includes a user interface module 7 for providing a user access device 9 with access to decision tree module *5* and knowledge base 3 of system 1. The ~~U~~user access device 9 may be~~access system 1 using~~, for example, a personal computer that communicates with system 1 via the Internet according to techniques well known in the art.

Beginning on page 5, please amend the second paragraph in the Detailed Description of the Preferred Embodiments section as follows:

Referring now to FIG. 2, there is shown a decision tree 11 that is contained in decision tree module 5 that is used to diagnose a particular fault. Decision tree 11 is made up of a plurality of decision points D(2), D(4), D(6,) D(8), D(10), D(20) and D(30), as well as a plurality of resolution points R(12), R(14), R(16), R(18), R(22), R(24), R(26) and R(28). Each of decision points D have associated therewith a query designed to identify a symptom of the fault thereby leading to an eventual diagnosis. Each query has associated therewith a number of potential responses to the query from which a user, via the user access device 9, may choose where each of the responses identifies a possible symptom of the fault. In order to guide the user ~~9~~ in identifying the correct symptoms and thus choosing the appropriate response, an image illustrating each of the symptoms associated with the responses is retrieved from knowledge base 3 and displayed to the user access device 9. By comparing the visual symptoms of the fault to be diagnosed to the images associated with each response, the user ~~9~~ is aided in identifying the symptoms of the fault and selecting the correct response to the query. Thus, by navigating decision tree 11 to a resolution point R with the guidance of illustrative images, a diagnosis of the fault can be made without necessarily requiring an engineer to observe the fault first hand.

Beginning on page 6, please amend the third paragraph in the Detailed Description of the Preferred Embodiments section as follows:

For example, if the user ~~9~~ is using system 1 to diagnose a defective circuit board, then the query associated with decision point D(30) may be directed to determining what type of void defect the circuit board has. Associated with the query of decision point D(30) are two potential responses -- a rim void or a resist plug void -- from which the user ~~9~~ may select as a response to the query. Displayed ~~on~~to the user access device 9 are images 30~~1~~ and 40~~3~~, shown in FIGS. 3 and 4, respectively, that are stored in knowledge base 3 and which illustrate to the user ~~9~~ the appearance of a rim void and a resist plug void, respectively. By comparing the defective circuit board to images 1 and 3, the user ~~9~~ can more accurately determine which type of void defect has caused the circuit board to fail. Based on the comparison, the user, via the user access device 9, will either navigate decision tree 11 to resolution point R(24) or R(26) at which point the type of defect causing the circuit board to fail will have been uniquely identified as either a rim void or a resist plug void.

Beginning on page 6, please amend the fourth paragraph in the Detailed Description of the Preferred Embodiments section as follows:

Thus, decision tree 11 is constructed so that once navigation of decision tree 11 reaches a resolution point, sufficient symptoms have been provided to uniquely identify the fault. In addition, upon reaching a resolution point, a diagnostic image illustrating the fault is retrieved from knowledge base 3 and displayed ~~on~~to the user access device 9 so that the user ~~9~~ can visually confirm that the diagnosis is correct. Also retrieved from knowledge base 3 and provided to the user via the user access device 9 is information describing the likely causes of the diagnosed fault as well as the resolution of the fault. For example, if navigation of decision tree 11 resulted in a diagnosis that a resist plug void was the cause of board failure, then displayed on the ~~to~~ user access device 9, as shown in FIG. *5*, are the likely causes for resist plug voids and recommended remedial actions. Accordingly, by navigating decision tree 11 and reaching a resolution point, user ~~9~~ is presented, via the user access device 9, with a diagnosis of the fault in question, a diagnostic image illustrating the fault, likely causes of the fault and recommended remedial actions.

Beginning on page 7, please amend the fifth paragraph in the Detailed Description of the Preferred Embodiments section as follows:

The diagnostic information may be presented to the user ~~9~~ in any suitable manner in which the user ~~9~~ can reach a resolution of the fault to be diagnosed. For example, decision tree 11 may be constructed to include decision points having queries with more than two possible responses from which to choose with an image illustrating each response. Also, in certain situations where the diagnosis of the fault is complex, the user ~~9~~ may be required to traverse several decision points to reach a resolution point and thus determine the cause and remedy of the fault. In addition, system 1 may present to the user, via the user access device 9, all the resolution points and allow the user ~~9~~ to compare the fault to be diagnosed to the illustrative images associated with each of the resolution points so that the user ~~9~~ can directly diagnose the fault without having to respond to queries for traversing decision tree 11. The diagnostic information contained in knowledge base 3 may similarly be arranged and presented to the user, via the user access device 9, in any manner that enables the user ~~9~~ to diagnose the fault in question.